TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROP. FY
QSS Group, Inc.	NAS5- 99124 TASK NO. 213 AMENDMENT	567-315-90-18-89	0 0

TASK TITLE: (NTE 80 characters; include Project name)

Ka-band Modulator Characterization

APPROVALS: (Type or print name and sign)

	DATE	ORG CODE	MAIL CODE	PHONE
ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) M. Powers Michael K. Powers	2/7/00	567	567	286-4820
BRANCH HEAD J. Chitwood John Chitwood	2-7-00	CODE 567		PHONE 286-5936
CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) for R. Lebair Deborah A. Clark	2/11/00	CODE 560		PHONE 286-6586

FLIGHT HARDWARE, CRITICAL GSE OR SOFTWAR (IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)	CONTRACTING OFFICER'S QUALITY REP:	DESIGNATED FAM:
[x] NO [ ] YES		

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)
C.O. Requested Quote on:
Date: FEB 14 2000

Contractor will develop specification or statement of work under this task for a future procur [x] NO [ ] YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. [x] No [ ] YES [ ] N/A

Government Furnished Property/Facilities: [ ] No [x] YES – SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: [ ] NO [x] YES If yes: [x] TOTAL [ ] Partial
If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: [x] No [ ] YES

Highlighted Contract Clauses: *(to be completed by Contracting Officer)*

The effective date of this task is March 23, 2000.

INCENTIVE FEE STRUCTURE (check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	x No. 1	No. 2	No. 3	No. 4	No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

(To be completed by Contracting Officer)

The target cost of this task order is $ 27,397.
The target fee of this task order is $ 1,781.
The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is $ 29,178.

The maximum fee is $ 2,603.
The minimum fee is $0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

Lorrie L. Eakin — SIGNATURE OF CONTRACTING OFFICER

3/23/00 — DATE

Lorrie L. Eakin
Contracting Officer — TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE

DATE

GSFC FORM 703-1845 12/98 (OLDER VERSIONS ARE OBSOLETE)

DISTRIBUTION: CONTRACTOR, CONTRACTING OFFICER, COTR, CODE 303, RESOURCES ANALYST, ASSISTANT TECHNICAL REPRESENTATIVE

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REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.		
	NAS5-	TASK NO.	AMENDMENT
QSS Group, Inc.	99124	213	

Applicable paragraphs from contract Statement of Work: Function 2 B, C and Function 5 A

STATEMENT OF WORK:

Contractor will assist in designing and building an engineering model Ka-band QPSK modulator:

1. Fully characterize a 26 GHz linear phase modulator including RF and modulation frequency range, VSWR, conversion loss, amplitude balance and phase, and BER testing over temperature.
2. Based on modulator performance, determine the necessary input and output filtering, output amplification required, and identify commercial components that meet those requirements.
3. Breadboard the QPSK modulator unit, including all filtering and/or amplifier components and fully characterize
4. Perform BER tests over a temperature range from -10 to +50 C
5. Issue a final report of the work accomplished and results obtained

PERFORMANCE SPECIFICATIONS:

Final Report to contain the detailed engineering results as described in the SOW. This report shall include recommendations for design improvement, if applicable, as well as report the measured results of the modulator. The report should be delivered in MS Word format.

APPLICABLE DOCUMENTS:

None

TASK END October 31, 2000

MILESTONES/DELIVERABLES AND DATES:

Breadboard the modulator	7/15/2000
Modulator characterization	8/15/2000
BER tests over temperature	9/15/2000
Final report	10/31/2000

PERFORMANCE STANDARDS:

Schedule: On-time delivery/completion of the above deliverables/milestones

Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

M. Powers Bldg. 19